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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/645,598   | 08/22/2003  | Yuzuru Nanjo         | 032739M106          | 9471             |
| 441  | 7590        | 05/19/2006           |                     | EXAMINER         |
| SMITH, GAMBRELL & RUSSELL, LLP<br>1850 M STREET, N.W., SUITE 800<br>WASHINGTON, DC 20036 |             |                      | TRAN, HOAN H        |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2852                |                  |

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H-1

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/645,598             | NANJO ET AL.        |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Hoan H. Tran           | 2852                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6,9,11 and 14-17 is/are rejected.
- 7) Claim(s) 7,8,10,12 and 13 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 February 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

|   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/23/2004</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Abe et al. [6,078,780]

Abe et al. disclose an image heating apparatus [Fig. 2] comprising a fixing member [10] including a support member [16], a heating layer [1] formed adjacent thereto in a form of a thin film of a non-magnetic, electrically conductive material [Col. 6, lines 6-9], and a magnetic field generating means including an exciting coil [18].

3. Claims 9, 14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagahira [6,605,802].

Nagahira discloses an image heating apparatus [106] comprising a fixing roller [1] including a heating layer [1a] formed of a magnetic metal and heating layer [1b] formed of a non-magnetic metallic layer [Claim 7; Col. 7, lines 60-65]; a pressure roller [7] in contact with the fixing roller to form in between a nip [N] through which paper [P] is passed; and a magnetic field generating means [4] disposed outside of the fixing roller [Fig. 6]; wherein said magnetic field generating means including a magnetic core [3] disposed near an exciting coil [2].

Regarding claim 16, Fig. 2 of Nagahira shows the magnetic field generating means is disposed inside the fixing roller near a portion where the fixing roller and the pressure roller make contact with each other.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al. in view of Okabayashi et al. [6,037,576]

Abe et al., as discussed above, discloses the claimed invention except for a temperature measuring means is provided inside the fixing member.

Okabayashi et al. disclose an image heating apparatus Fig. 5] comprising a temperature measuring means provided inside the fixing member.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the image heating apparatus disclosed by Abe et al. to include a temperature measuring means provided inside the fixing member as taught by Okabayashi et al. for the purpose of effectively controlling the temperature of the heating layer of the fixing member.

7. Claims 3-6, 11, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagahira in view of Abe et al.

Nagahira, as discussed above, discloses the claimed invention except for magnetic core of the magnetic field generating means is made of high magnetic permeability material and the pressure roller including a heating layer formed of a magnetic metal.

Abe et al. disclose an image heating apparatus comprising a magnetic field generating means having cores [17, 18] made of high magnetic permeability material [Col. 4, lines 27-34], and a pressure roller [Fig. 6] including a heating layer formed of a magnetic metal [Col. 8, line 56 to Col. 9, line 3].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the image heating apparatus disclosed by Nagahira to include a magnetic field generating means having magnetic core made of high magnetic permeability material and a pressure roller including a heating layer formed of a magnetic metal as taught by Abe et al. for the purpose of increasing the efficiency of energy consumption of the fixing roller.

***Allowable Subject Matter***

8. Claims 7, 8, 10, 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoan H. Tran whose telephone number is (571) 272-2141. The examiner can normally be reached from 8:30 AM - 5:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Arthur Grimley can be reached at (571) 272-2136. The central office fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

HHT  
May 13, 2006

  
HOAN TRAN  
PRIMARY EXAMINER